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16. Abstract <p>The purpose of this research effort is to evaluate unique intersection designs for their suitability for use in lieu of an existing or proposed traffic signal. Traffic signals can cause unnecessary delay and capacity restrictions due to the operational characteristics of signalized intersections. This project identified alternative intersection (interchange) designs that could be implemented at signalized intersections that would serve the current traffic and also provide a higher capacity for the main traffic movement. Analyses were conducted primarily using SYNCHRO 6 software from Trafficware Ltd. To model the different intersection/interchange designs identified for analysis. Eight designs were selected for in-depth analysis: Continuous Flow, Center -Turn Overpass, Echelon, Median U-turn, Michigan Diamond, Quadrant, SPUI, and Tight Diamond. While the Tight Diamond performed very well in the simulation, the consensus of experienced traffic engineers (Thrower, Naylor, et al.) was that there were errors in the simulation that resulted in much better than expected results. Further analysis will be conducted on this design, not related to this project, to see if the problem can be identified. Because of the lack of confidence in the Tight Diamond results, the Tight Diamond will not be included in the recommendations. When the different designs were evaluated at selected locations in different areas of the state, the lower cost designs usually prevailed based on predicted traffic levels and construction costs. The evaluated designs did indicate a significant increase in capacity when compared to a "regular" signalized intersection.</p>			
17. Key Words Unconventional Intersection Designs; Alternative designs for signalized intersections; Center-Turn Overpass; Continuous Flow Intersection; Echelon Intersection; Quadrant Intersection; Michigan Diamond Intersection; Median U-turn Intersection; Single Point Urban Interchange; SPUI; Rural Signalized intersections; High-capacity intersections;		18. Distribution Statement	
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